



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/027,814 | 12/20/2001 | Azmi B. Osman | 27006-0002 | 9480 |

7590

11/26/2004

Douglas A. Mullen
Dickinson Wright PLLC
Suite 800
1901 L. Street, NW
Washington, DC 20036

| |
|----------|
| EXAMINER |
|----------|

VAN PELT, BRADLEY J

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3682

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,814

Applicant(s)

OSMAN, AZMI B.

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 16 recites the limitation "the region of reduced height" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-6, 10, 12-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozaki (JP 11-280548) in view of Adams (USPN 2,437,013).

Onozaki discloses an oil pan for an engine comprising: a plurality of substantially parallel, spaced-apart reinforcement channels (see Fig. 3 bottom grooves) extending from adjacent a first end (23) of the oil pan to adjacent a second end (thinner area) of the oil pan, each channel having a base and two sides and an open top, the channels tapering downwardly from the first end and the second end towards an accumulation area (see fig. 1 flat circular portion 28) of the oil pan; wherein the reinforcement channels are substantially U-shaped; the second end of the oil pan has an end surface which is substantially planar; said end surface has no tool access pockets therein; wherein adjacent the second end and intermediate the width of the second end, the oil pan has a region (3) of reduced height, and wherein the region of reduced height having a planar portion into which the at least one reinforcing channel does not extend; wherein the taper is created by curving the channels with a large radius of curvature; wherein the oil pan has a

Art Unit: 3682

main body, the main body having two side walls (21, 22), a first end wall (23), and a base (25), and wherein the accumulation area is integral with the base; the oil pan has a region of reduced height and the main body has a second end wall (20) which tapers into the region of reduced height; wherein there are no channels in the accumulation area; the channels extend up the first end wall but at a reducing height up the first end wall (see figs. 2 and 3 outline of channels extend up wall); wherein the channels along the base are of a height which is less than their height in the region of reduced height; wherein there are three channels.

Onozaki does not disclose the accumulation area is offset a first distance from the first end and a second distance from the second end.

Adams shows the accumulation area is adjacent a lowest point of the oil pan and is offset a first distance from the first end and a second distance from the second end.

To modify the apparatus of Onozaki so as to offset the accumulation area a distance from the first and second ends would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Adams that such an arrangement improves the location of the drain plug for easier access to the technician.

4. Claims 1, 2, 4-6, 10, 12-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moller (USPN 4,395,982) in view of Adams.

Moller discloses an oil pan for an engine comprising: a plurality of substantially parallel, spaced-apart reinforcement channels (U shaped recesses in fig. 2) extending from adjacent a first end (left end in fig. 1) of the oil pan to adjacent a second end (right end of fig. 1) of the oil pan, each channel having a base and two sides and an open top, the channels tapering downwardly

Art Unit: 3682

from the first end and the second end towards an accumulation area (see fig. 2) of the oil pan;
wherein the reinforcement channels are substantially U-shaped;

the second end of the oil pan has an end surface which is substantially planar (flat rim-like surface);

said end surface has no tool access pockets therein;

wherein adjacent the second end and intermediate the width of the second end, the oil pan has a region of reduced height, and wherein the region of reduced height having a planar portion into which the at least one reinforcing channel does not extend (the number of channels on the left and right sides are not equal therefor one of them does not extent to reduced height portion); wherein the taper is created by curving the channels;

wherein the oil pan has a main body, the main body having two side walls, a first end wall, and a base, and wherein the accumulation area is integral with the base;

the oil pan has a region of reduced height and the main body has a second end wall which tapers into the region of reduced height (side portions taper into area of reduced height);

wherein there are no channels in the accumulation area (portion at the bottom that extends lowest has no channels therein, see fig. 1);

the channels extend up the first end wall but at a reducing height up the first end wall;
wherein there are three channels.

Moller does not disclose the accumulation area is offset a first distance from the first end and a second distance from the second end.

Adams shows the accumulation area is adjacent a lowest point of the oil pan and is offset a first distance from the first end and a second distance from the second end.

To modify the apparatus of Moller so as to offset the accumulation area a distance from the first and second ends would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Adams that such an arrangement improves the location of the drain plug for easier access to the technician.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onozaki (JP 11-280548) in view of Adams as applied to claims 1, 2, 4-6, 10, 12-15, and 17 above, and further in view of Hofbauer et al. (USPN 4,296,716).

The above reference combination discloses all of the instantly claimed invention except the reinforcement channels are V-shaped.

Hofbauer et al. show reinforcement channels that are V-shaped. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the channels in a V-shape, since Hofbauer et al. state at column 3, lines 43-48, that such a modification would ensure better cooling of the oil.

6. Claims 7-9 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozaki (JP 11-280548) in view of Adams as applied to claims 1, 2, 4-6, 10, 12-15, and 17 above, and further in view of Takubo (USPN 4,770,276).

The above reference combination does not disclose the planar portion is adapted to releasably receive thereon a horizontal portion of a substantially L-shaped cover plate; the cover plate has a substantially upright portion such that when the cover plate is mounted on the planar portion, the substantially upright portion is substantially coplanar with the end surface; wherein the substantially upright portion has a securing flange at an end thereof remote from the

Art Unit: 3682

horizontal portion; a plurality of bolt holes are provided in each of the securing flange and the horizontal portion; wherein bolt holes are not provided in the upright portion.

Takubo discloses a planar portion is adapted to releasably receive thereon a horizontal portion (28) of a substantially L-shaped cover plate (27); the cover plate has a substantially upright portion (mid-portion) such that when the cover plate is mounted on the planar portion, the substantially upright portion is substantially coplanar with the end surface; wherein the substantially upright portion has a securing flange (30) at an end thereof remote from the horizontal portion; a plurality of bolt holes are provided in each of the securing flange and the horizontal portion; wherein bolt holes are not provided in the upright portion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the oil pan of the above reference combination with a cover plate for the purpose of reinforcing the mounting of the oil pan to the transmission.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moller in view of Adams as applied to claims 1, 2, 4-6, 10, 12-15, and 17 above, and further in view of Hofbauer et al. (USPN 4,296,716).

The above reference combination discloses all of the instantly claimed invention except the reinforcement channels are V-shaped.

Hofbauer et al. show reinforcement channels that are V-shaped.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the channels in a V-shape, since Hofbauer et al. state at column 3, lines 43-48, that such a modification would ensure better cooling of the oil.

Art Unit: 3682

8. Claims 7-9 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moller in view of Adams as applied to claims 1, 2, 4-6, 10, 12-15, and 17 above, and further in view of Takubo (USPN 4,770,276).

The above reference combination does not disclose the planar portion is adapted to releasable receive thereon a horizontal portion of a substantially L-shaped cover plate; the cover plate has a substantially upright portion such that when the cover plate is mounted on the planar portion, the substantially upright portion is substantially coplanar with the end surface; wherein the substantially upright portion has a securing flange at an end thereof remote from the horizontal portion; a plurality of bolt holes are provided in each of the securing flange and the horizontal portion; wherein bolt holes are not provided in the upright portion.

Takubo discloses a planar portion is adapted to releasable receive thereon a horizontal portion (28) of a substantially L-shaped cover plate (27); the cover plate has a substantially upright portion (mid-portion) such that when the cover plate is mounted on the planar portion, the substantially upright portion is substantially coplanar with the end surface; wherein the substantially upright portion has a securing flange (30) at an end thereof remote from the horizontal portion; a plurality of bolt holes are provided in each of the securing flange and the horizontal portion; wherein bolt holes are not provided in the upright portion.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the oil pan of the above reference combination with a cover plate for the purpose of reinforcing the mounting of the oil pan to the transmission.

Response to Arguments

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is 703.305.8176.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703.308.3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJVP


DAVID A. BUCCA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600